



# The High Plains Drifter

NATIONAL WEATHER SERVICE  
NORTH PLATTE, NE



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Comments and suggestions are always welcome. Your feedback is very important to us!

## SEVERE THUNDERSTORM SAFETY

Thunderstorms are a common occurrence across Nebraska, and if the right conditions exist, some will become severe. Recall that if a thunderstorm produces hail equal to or greater than 3/4 of an inch in diameter (penny size), winds equal to or greater than 58 miles per hour, or a tornado, it is considered severe. Even though thunderstorms can and do occur at any time of the year, the most common time for thunderstorms, and especially severe thunderstorms, is during the spring, summer, and early fall.

There are a number of dangerous aspects of thunderstorms, severe or not, that pose a threat to life and property.

- Lightning - Occurs with ALL thunderstorms.
- Floods - Kills more people on average than any other weather hazard.
- Straight-Line Winds - Can exceed 100 miles per hour and cause damage equivalent to a tornado.
- Large Hail - Causes millions of dollars each year in crop and property damage.
- Tornadoes - Nature's most violent storm, with winds over 200 miles per hour possible.

### What do I do before the storm?

- **Develop a plan of action!** Know where to go when severe weather strikes. Prior to severe weather season, make sure to identify a safe place to take shelter at home, work, school, and outdoors. Once you have a plan of action and a shelter identified, have frequent drills to ensure everyone knows what to do at all times.
- Know the name of the county where you live and the names of surrounding counties and cities. Warnings are issued on a county basis and cities will be named within the warning when possible.
- Check weather forecasts before leaving for extended periods outdoors.
- Keep an AM/FM radio or NOAA Weather Radio All-Hazards with you to get the latest weather information.
- Watch for signs of approaching storms, such as darkening skies, increasing winds, flashes of lightning, thunder, and static on your AM radio.

### Did you know...

- The average forward speed of a tornado is 30 miles per hour, but may vary from nearly stationary to near 70 miles per hour.
- Lightning can occur from cloud-to-cloud, within a cloud, cloud-to-ground, or cloud-to-air.
- A downburst is a small area of rapidly descending air beneath a thunderstorm. Once this air hits the ground, it spreads out, causing potentially damaging straight-line winds. Downbursts present an extreme danger to aviation.
- Large hail stones can fall at speeds greater than 100 miles per hour.
- The largest hailstone ever recorded in the United States fell in Aurora, Nebraska, on June 22, 2003. This hailstone had a 7 inch diameter and a circumference of 18.75 inches.
- The "100 year flood" is a climatic average; there is a 1% chance that a 100 year flood will occur in any given year.

## **SEVERE WEATHER DEFINITIONS**

**SEVERE THUNDERSTORM** — A thunderstorm is considered severe when it produces any of the following: Hail 3/4 of an inch (penny size) or larger in diameter, winds which equal or exceed 58 miles per hour, or a tornado.

**SEVERE THUNDERSTORM WATCH** — Issued when conditions are favorable for the development of severe thunderstorms in and close to the watch area. The size of the watch can vary depending on the weather situation and are usually issued for a duration of 4 to 8 hours. During the watch, people should review severe thunderstorm safety rules and be prepared to move a place of safety if threatening weather approaches.

**SEVERE THUNDERSTORM WARNING** — Issued when a severe thunderstorm is detected by radar or reported by storm spotters. Information in this warning will include the location of the storm, what areas will be affected, and the primary threat associated with the storm. People in the affected area should seek safe shelter immediately. Severe thunderstorms can produce tornadoes with little or no advance warning. Severe Thunderstorm Warnings can be issued without a Severe Thunderstorm Watch already in effect.

**TORNADO** — A violently rotating column of air that extends from a convective cloud to the ground. The entire column of air associated with a tornado is not always visible, at times a tornado is only visible once it has picked up enough dirt and debris.

**TORNADO WATCH** — Issued when conditions are favorable for the development of tornadoes in and close to the watch area. Their size can vary depending on the weather situation and are usually issued for a duration of 4 to 8 hours. During the watch, people should review tornado safety rules and be prepared to move a place of safety if threatening weather approaches.

**TORNADO WARNING** — Issued when a tornado is detected by radar or reported by storm spotters. Information in this warning will include the location of the tornado and what areas in its path. People in the affected area should seek safe shelter immediately as tornadoes can strike with little to no warning. Warnings can be issued without a Tornado Watch already in effect.

**SEVERE WEATHER STATEMENT** — A product issued which provides follow-up information on any severe weather warnings in effect and conditions which have occurred or are currently occurring. This information includes updated storm paths and any storm reports, such as hail size or damage, received from spotters.

**FLASH FLOOD** — A rapid rise in water that occurs with little or no advanced warning, usually as the result of intense rainfall over a relatively small area in a short amount of time. Flash Floods can also be caused by dam or levee failures, ice jams, and topography.

**FLASH FLOOD WATCH** — Issued to indicate current or developing hydrologic conditions that are favorable for flash flooding in and close to the watch area. When a watch is issued, be aware of any potential flood hazards. Those in the affected area are urged to be ready to take quick action if a Flash Flood Warning is issued or flooding is observed.

**FLASH FLOOD WARNING** — Issued when flash flooding is in progress, imminent, or highly likely. Those in the affected area should evacuate immediately or move to higher ground if possible. Information in this warning will include the locations in flood and any areas which may be impacted. Flash Flood Warnings can be issued without a Flash Flood Watch in effect.

**FLASH FLOOD STATEMENT** — A product issued which provides follow-up information on any flooding which has occurred or is currently occurring.

## COOPERATIVE WEATHER OBSERVER AWARDS



Karen and Jerry Rotherham of Ewing were presented an award by Mark Byrd for 25 years of exceptional service as Cooperative Weather Observers. The Rotherhams began recording temperature and precipitation data in January of 1981. Karen and Jerry took up the challenge after Mrs. Leona Jefferies retired as the official observer for the community of Ewing.

Kathy Ruppert was presented an award by Christina Hannon and Angela Oder for 15 years of outstanding services as a Cooperative Weather Observer. Kathy took over the family tradition of recording precipitation data north-northwest of McCook in April of 1991. Mrs. Leila Ruppert began the reporting for the family in 1960.



Orvin and Joan Cox were presented awards by Brian Hirsch and Angela Oder for Orvin's 40 years of service and Joan's 20 years of service as dedicated Cooperative Weather Observers. Orvin began recording precipitation data in 1966 when the previous observer, Mrs. Amsberry moved. Joan became the primary observer for Mason City in 1986 recording temperatures and precipitation, and Orvin became his wife's backup observer.

## UPCOMING WEATHER OBSERVER AWARDS

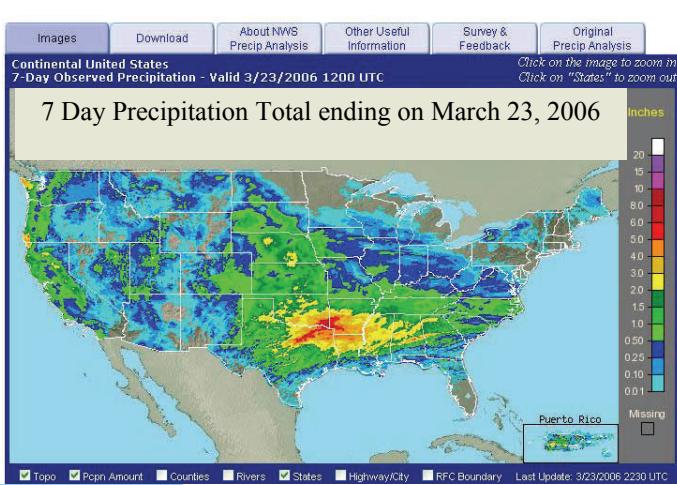
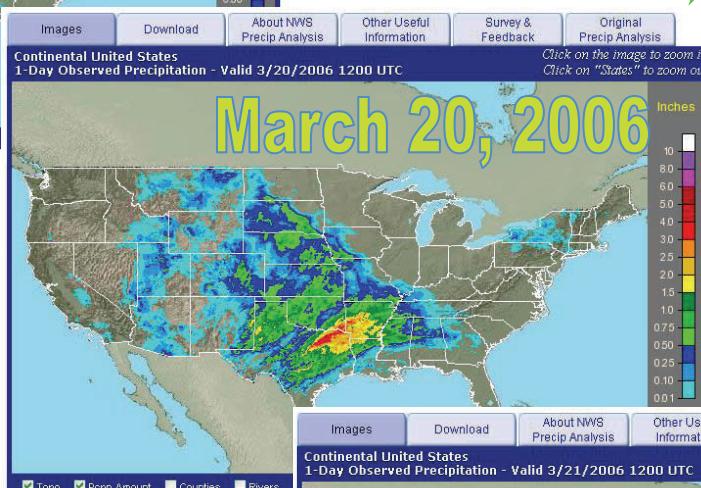
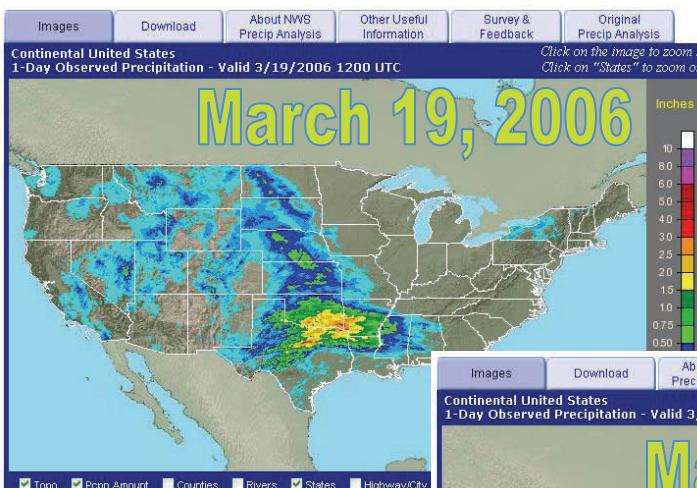
The following observers will be celebrating 10 to 60 years of service this year. We want to send out a thank you for all your time and effort over the years.

Marvin Doolittle of Amelia for 30 years of Service  
Patrick Pelseter of Paxton for 10 years of Service  
Gerald and Bev Osborn of Ainsworth for 60 years of Service.

# EXPERIMENTAL PRECIPITATION ANALYSIS

Do you ever wonder where the rain fell and how much fell? The National Weather Service has experimental graphics available to show where there has been precipitation at the new Precipitation Analysis website. A link is provided on the North Platte NWS homepage on the left hand column labeled 'Precip Estimate'. The graphics are created using radar data, rain gages, and satellite data. Examples of the liquid precipitation from the winter storm are shown below for each day and also for a seven day total.

[http://www.srh.noaa.gov/rfcshare/precip\\_analysis\\_new.php](http://www.srh.noaa.gov/rfcshare/precip_analysis_new.php)



## WARMEST JANUARY ON RECORD

January 2006 was the warmest on record for North Platte and Valentine, with average temperatures more typical of March.

January 2006 will go down as the warmest January on record for both North Platte and Valentine. The average mean monthly temperature for January 2006 in North Platte was 37.0 degrees; a whopping 13.8 degrees above the normal of 23.3 degrees. The mean temperature of 37.0 degrees broke the record of 34.0 degrees set previously in 1914. The average daily high temperature for the month in North Platte was 54.5 degrees, which is 18.0 degrees above the normal of 36.5 degrees. This eclipsed the record of 47.8 degrees set previously in 1906. The average daily low temperature was 19.5 degrees, which was 9.6 degrees above the normal of 9.9 degrees. This reading did not set a record but it was sixth warmest. Ten 60+ degree days occurred during the month of January, which broke the previous record of six days set during three January's in the past 130 years. Five temperature records were set for the month and are outlined below.

For Valentine, the unprecedented warmth was felt for January 2006 as well. The average mean temperature for the month was 36.5 degrees, which was 15.7 degrees above the normal of 20.8 degrees. This shattered the record of 31.7 degrees, set previously in 1990, by nearly 5 degrees. The average high temperature for the month was 50.5 degrees, which was 16.7 degrees above the normal of 33.8 degrees. The average daily low temperature for the month was 22.6 degrees which was 14.8 degrees above the daily normal low of 7.8 degrees. One temperature record was set for the month and 6 days saw high temperatures at or above 60 degrees.

Dry conditions continued for the month of January for both Valentine and North Platte. For North Platte, 0.21 inches of precipitation fell at Lee Bird Field. This was 0.18 inches below the normal of 0.39 inches. Only a trace of snow fell at Lee Bird Field, which tied for the least snowiest on record and was 5.0 inches below the normal of 5.0 inches. For Valentine, 0.19 inches of precipitation fell at Miller Field, which was 0.11 inches below the normal of 0.30 inches. Only 0.3 inches of snow fell at Valentine, which is 4.5 inches below the normal of 4.8 inches. Since 1948, only three other January's had less than 0.3 inches of snowfall.

**Daily records set at North Platte for January 2006**

Date	Temperature	Previous Record	Previously Set
1/6	64	64	1965
1/7	67	65	1965
1/11	68	64	1987
1/14	68	63	1990
1/26	36*	31	1890/ 1914/ 1942/ 1947

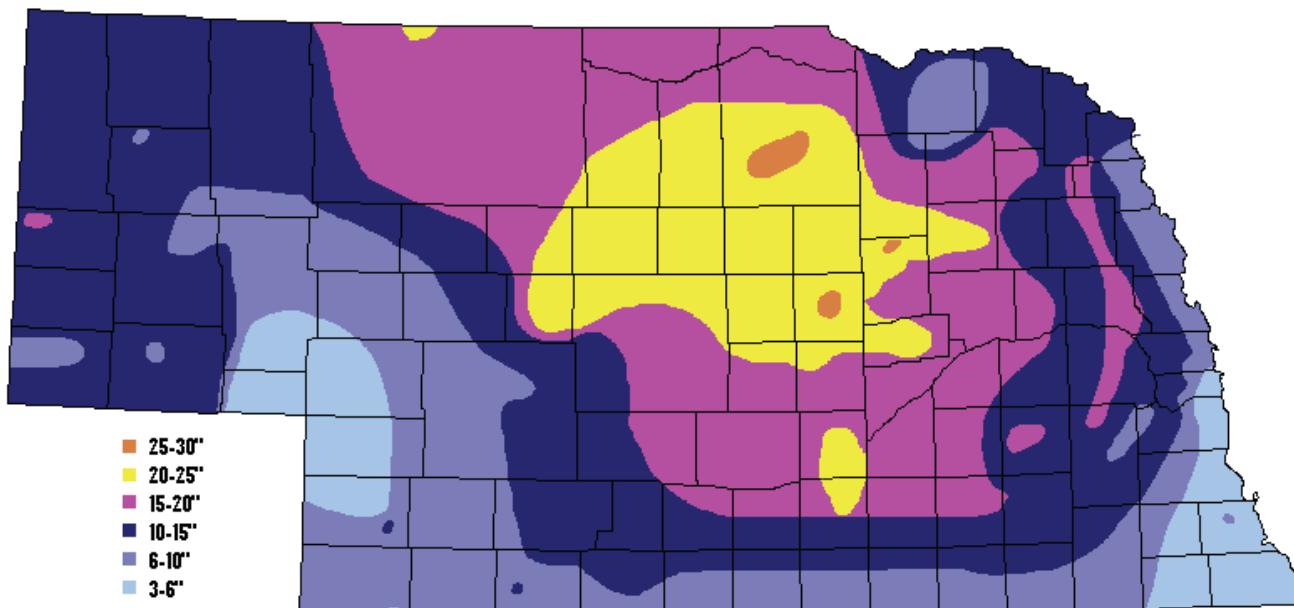
**Daily records set at Valentine for January 2006**

Date	Temperature	Previous Record	Previously Set
1/14	71	65	2000

\* denotes a record daily high minimum temperature

## MARCH 19-21, 2006 SNOWFALL AMOUNTS

The residents of Nebraska welcomed the Spring season with a long and in some cases record setting winter storm. All areas within the 77,355 square mile region which comprises the state received measurable snowfall. The information below provides an overview of snowfall distribution within the state, as well as the records set and heaviest snowfall reports.



### Official Snowfall Records

Location	1-Day	2-Day
Grand Island	17.8"	20.7"
Hastings	17.4"	20.3"

### Unofficial Snowfall Records

Location	1-Day	2-Day	3-Day
Chambers	-	24.0"	29.0"
Mason City	12.0"	-	-
Taylor	-	-	23.5"

### Top 5 Storm Totals

Location	Storm Total
Greeley	30.0"
Chambers	29.0"
Ord	26.0"
Laretto	25.3"
Fullerton	25.0"

## CLIMATOLOGICAL CALENDAR

### Climatological Data for December 2005 through March 2006

Location	Month	Average	Departure	Rain	Departure	Highest	Lowest
North Platte	December	25.5 °F	-0.2 °F	0.22 inches	-0.18 inches	66 °F (26th)	-14 °F (8th)
	January	37.0 °F	+13.8 °F	0.21 inches	-0.18 inches	68 °F (11 and 14th)	8 °F (23rd)
	February	28.1 °F	-1.3 °F	0.13 inches	-0.38 inches	76 °F (28th)	-11 °F (17 and 18th)
	March	36.7 °F	-1.3 °F	0.73 inches	-0.51 inches	75 °F (29th)	8 °F (24th)
Valentine	December	23.0 °F	-0.6 °F	0.23 inches	+0.10 inches	59 °F (26th)	-20 °F (8th)
	January	36.5 °F	+15.7 °F	0.19 inches	-0.11 inches	71 °F (14th)	11 °F (17th)
	February	24.6 °F	-2.0 °F	0.23 inches	-0.25 inches	76 °F (28th)	-26 °F (18th)
	March	32.2 °F	-3.1 °F	1.30 inches	+0.19 inches	72 °F (7th)	-2 °F (24th)

#### Normal High/Low Temperatures

Location	Mar 1	Apr 1	May 1	Jun 1
North Platte	47/19	58/29	67/39	78/50

#### Normal High/Low Temperatures

Location	Mar 1	Apr 1	May 1	Jun 1
Valentine	43/18	54/27	66/38	77/49

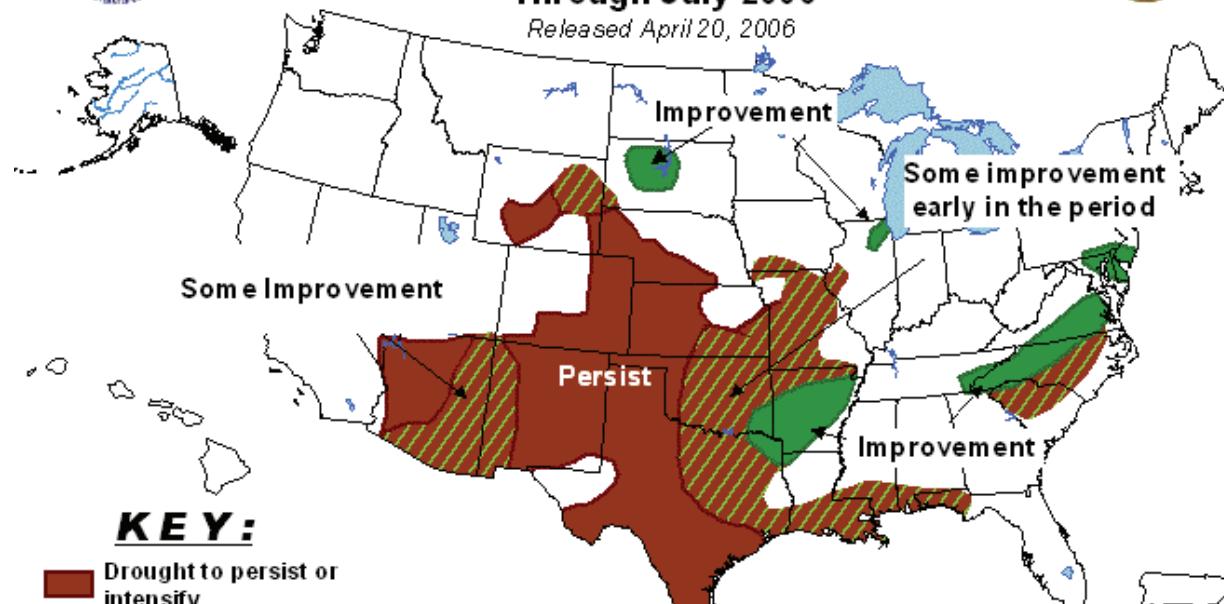


### U.S. Seasonal Drought Outlook

**Through July 2006**



Released April 20, 2006



For more information visit  
<http://www.cpc.ncep.noaa.gov/>

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***Check out our website at  
weather.gov/northplatte***

***Lightning Safety Awareness Week  
June 18th-24th, 2006***